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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,817	10/17/2000	Ende Shan	196273US-0 CONT	2184
22850 7	590 01/31/2003			
•	VAK, MCCLELLAN	EXAMINER		
1940 DUKE S'		TOLEDO, FERNANDO L		
ALEXANDRI	A, VA 22314			
			ART UNIT	PAPER NUMBER
			2823	
			DATE MAILED: 01/31/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	Applicant(s)	
Advisory Action	09/688,817	SHAN, ET AL.	SHAN, ET AL.	
Advisory Action	Examiner	Art Unit		
	Fernando Toledo	2823		
The MAILING DATE of this communicatio	on appears on the cover sheet wi	th the correspondence a	ddress	
THE REPLY FILED 30 December 2002 FAILS TO Therefore, further action by the applicant is require final rejection under 37 CFR 1.113 may only be eicondition for allowance; (2) a timely filed Notice of Examination (RCE) in compliance with 37 CFR 1.	ed to avoid abandonment of this ther: (1) a timely filed amendme f Appeal (with appeal fee); or (3	s application. A proper lead to the application.	reply to a olication in	
PERIOD FO	OR REPLY [check either a) or t	0)]		
a) The period for reply expiresmonths from the	-			
b) The period for reply expires on: (1) the mailing date of event, however, will the statutory period for reply expir ONLY CHECK THIS BOX WHEN THE FIRST REPL 706.07(f).	e later than SIX MONTHS from the mailing	ng date of the final rejection.		
Extensions of time may be obtained under 37 CFR 1.136(a). have been filed is the date for purposes of determining the period 37 CFR 1.17(a) is calculated from: (1) the expiration date of the s (b) above, if checked. Any reply received by the Office later than earned patent term adjustment. See 37 CFR 1.704(b).	of extension and the corresponding amo shortened statutory period for reply original	unt of the fee. The appropriate ally set in the final Office action;	extension fee under or (2) as set forth in	
1. A Notice of Appeal was filed on App. 37 CFR 1.192(a), or any extension thereof				
2. The proposed amendment(s) will not be ent	tered because:			
(a) they raise new issues that would requir	e further consideration and/or s	earch (see NOTE below	<i>י</i>);	
(b) they raise the issue of new matter (see	Note below);			
(c) they are not deemed to place the application issues for appeal; and/or	cation in better form for appeal	by materially reducing of	or simplifying the	
(d) they present additional claims without	canceling a corresponding num	nber of finally rejected cl	aims.	
NOTE:				
3. Applicant's reply has overcome the following	g rejection(s): Rejections under s	ection 112 first paragraph.		
4. Newly proposed or amended claim(s) canceling the non-allowable claim(s).	would be allowable if submitte	d in a separate, timely f	iled amendment	
5.⊠ The a) affidavit, b) exhibit, or c) req			NOT place the	
6. The affidavit or exhibit will NOT be conside raised by the Examiner in the final rejection		OLELY to issues which	were newly	
7 ☑ For nurnoses of Anneal, the proposed ame	ndment(s) a)M will not be enter	red or h) will be enter	ed and an	

U.S. Patent and Trademark Office

10. Other: ____

explanation of how the new or amended claims would be rejected is provided below or appended.

8. The proposed drawing correction filed on ____ is a) approved or b) disapproved by the Examiner.

9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

The status of the claim(s) is (or will be) as follows:

Claim(s) withdrawn from consideration: _____.

Claim(s) allowed: ____.
Claim(s) objected to: ____.
Claim(s) rejected: <u>1-24</u>.

Application/Control Number: 09/688,817

Art Unit: 2823

ADVISORY ACTION

Response to Amendment

1. Applicant's amendment will not be entered since it does not place the Application in better conditions for allowance.

Response to Arguments

- 2. Applicant's arguments filed 12/30/02 have been fully considered but they are not persuasive for the foregoing reasons.
- 3. Applicant contests that the deposition temperature of the seed layer of Xu teaches away from the claimed invention since it discloses it to be at 200°C or below. However, Xu discloses in column 24, lines 11 13 that the deposition temperature can be the one taught by Wang in the U. S. patent 5,108,570; which is from 50 to 250°C. Xu teaches another way, which refers to a situation where a reference teaches a preferred, a better or an alternative way to a claimed way of accomplishing something. A reference must be considered for all it teaches. *Ashland Oil Inc. v. Delta Resins & Refractories, Inc.*, 776 F .2d 281, 296, 227 USPQ 657, 666 (Fed. Cir. 1985). Preferred embodiments and disclosed examples do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *Merck & Co. v. Biocraft Labs.*, 874 F2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Mills*, 470 F .2d 649,650, 176 USPQ 196, 198 (CCPA 1972).
- 4. Applicant contests that the obviousness-type double patenting rejection is improper because the U. S. patent 6,140,228 does not form the seed layer on a Ti liner layer nor that the seed layer is formed at a temperature of 220-300°C.



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5. Examiner respectfully submits that the seed layer of the U. S. patent 6,140,228 claims that the seed layer is formed on a liner/barrier layer (claim 1), claim 21 discloses that the liner/barrier layer "comprises a material selected from the group consisting of titanium, a titanium-tungsten alloy or titanium nitride." As for the temperature the '228

patent claims the range to be 300-420°C, which overlaps that of the present application.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fernando Toledo whose telephone number is 703-305-0567. The examiner can normally be reached on Mon-Fri 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Fernando Toledo Examiner Art Unit 2823

aft ahh-

tt January 29, 2003

> Olik Chaudhuri Supervisory Patent Examiner Technology Center 2800

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